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— with amended claims and statement

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For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.



WO 2004/016261 A1

(54) Title: METHOD FOR SUPPRESSING PROLIFERATION OF ABNORMAL PRION PROTEIN WITH LEUCINE,  
ISOLEUCINE OR VALINE

(57) Abstract: A method for suppressing proliferation of abnormal prion proteins is provided. Specifically, the method involves systemically, orally, intracerebrally or intraspinally administering an essential amino acid, in particular, one having a branched side chain, that is, one selected from leucine, isoleucine, and valine. Of these, leucine is most preferred.

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/JP 02/08209

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61K31/198 A61P33/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)  
EPO-Internal, WPI Data, CHEM ABS Data, PAJ, BIOSIS, EMBASE, MEDLINE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 96 21437 A (NEW YORK STATE OFFICE OF MENTA) 18 July 1996 (1996-07-18) page 2, paragraph 4 - paragraph 5 claims 1,7	1-12
X	US 5 919 823 A (RICHARDSON MARY ANN) 6 July 1999 (1999-07-06) claims 7,8	1-12
Y	EP 0 764 442 A (HOLT JOHN ALFRED GORTON) 26 March 1997 (1997-03-26) claims 1,8	1-12
Y	EP 0 824 919 A (HOLT JOHN ALFRED GORTON) 25 February 1998 (1998-02-25) claims 1,4	1-12
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- \*&\* document member of the same patent family

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP 02/08209

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 00 64420 A (KONG XIANQI ;NEUROCHEM INC (CA); SZAREK WALTER (CA); UNIV KINGSTON) 2 November 2000 (2000-11-02) page 1, paragraph 3 page 9, paragraph 4 page 22, paragraph 3 - paragraph 1; figure 23 ---	1-12
A	WO 01 26623 A (LAXDALE LTD) 19 April 2001 (2001-04-19) claims 1-3 page 10, paragraph 1 ---	
A	CALLEBAUT, ISABELLE ET AL: "Common prevalence of alanine and glycine in mobile reactive center loops of serpins and viral fusion peptides: do prions possess a fusio peptide?" JOURNAL OF COMPUTER-AIDED MOLECULAR DESIGN (1994), 8(2), 175-91 , XP008015408 page 189, paragraph 4 ---	
X	DATABASE WPI Section Ch, Week 200264 Derwent Publications Ltd., London, GB; Class B05, AN 2002-599522 XP002236107 & WO 02 49638 A (AJINOMOTO KK), 27 June 2002 (2002-06-27) abstract -----	7-9

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/JP 02/08209

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 1-6,10-12 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☒ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

## Continuation of Box I.2

Claims 1-12 relate to the treatment of diseases which are actually not well defined. The use of the definition "proliferation of abnormal prion proteins" in the present context is considered to lead to a lack of clarity within the meaning of Article 6 PCT. It is not fully possible to determine the diseases for which protection might legitimately be sought. The lack of clarity is such as to render a meaningful complete search not fully possible.

Consequently, the search has been restricted to the parts relating to the diseases described in the description at page 1, lines 13-21, with due regard to the general idea underlying the present invention.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP 02/08209

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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